

REMARKS

Upon entry of the present amendment, claims 1, 4, 10, 13 and 14 will have been amended while claims 15-21 will have been submitted for consideration by the Examiner. Claim 9 will have been canceled without prejudice or disclaimer of the subject matter. Additionally, the specification will have been amended to submit a new, more descriptive title as well as to eliminate several minor language informalities from the specification.

The amendments to the claims contained in the present paper are made solely in order to more clearly define the present invention, but are not intended to narrow the scope of the claims. Moreover, explicit support for the present invention is set forth in the disclosure of the present application at, inter alia, page 9, line 6 through page 11, line 2. Thus, the present amendment does not introduce prohibited new matter into the present application.

Newly submitted claims 15-21 are submitted for consideration by the Examiner so as to afford Applicant the scope of coverage to which he is entitled. Consideration of these claims and an indication of the allowability thereof is respectfully requested.

In view of the herein contained amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of each of the outstanding objections and rejections set forth in the above-mentioned Official Action, in due course. Such action is respectfully requested and is now believed to be appropriate and proper.

Initially, Applicant wishes to respectfully thank the Examiner for indicating his acceptance of the drawings filed in the present application on September 9, 2003.

Applicant further wishes to respectfully thank the Examiner for acknowledging Applicant's claim for foreign priority under 35 U.S.C. § 119 and for confirming receipt of the certified copy of the foreign priority document upon which the claim for foreign priority is based.

Yet additionally, Applicant wishes to thank the Examiner for considering the documents cited in the Information Disclosure Statements filed in the present application on December 12, 2003 and May 4, 2007, by the return of the signed and initialed PTO-1449 forms attached to these respective Information Disclosure Statements.

In the outstanding Official Action, the Examiner objected to claim 2 because of a number of noted informalities. By the present response, Applicant has made sure that claim 2 does not

contain the Examiner's noted informality and respectfully thanks the Examiner for bringing this matter to his attention so that it could be corrected.

Applicant has also amended the specification to eliminate several language informalities. In the outstanding Official Action, the Examiner additionally objected to the title of the invention as not being descriptive and required a new title that is clearly indicative of the invention to which the claims are directed. By the present response, Applicant has submitted a new title which is clearly directed to and indicative of the invention to which the pending claims are directed.

In the outstanding Official Action, the Examiner rejected claims 1, 5, 8, 13, and 14 under 35 U.S.C. § 103(a) as being unpatentable over ZHANG (U.S. Patent Publication No. 2002/0039142) in view of IKEDA (U.S. Patent No. 6, 421, 087). Claims 2-4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over ZHANG in view of the IKEDA and further in view of LUO (U.S. Patent No. 7,031,349). Claims 6 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over ZHANG in view of the IKEDA and further into what KATO (U.S. Patent No. 7,136,100). Claims 9 to 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over ZHANG in view of the IKEDA and further into JOGO (U.S. Patent No. 6, 940, 620).

Applicant respectfully traverses each of the above noted rejections and submits that they are inappropriate with respect to the combination of features recited in each of Applicant's claims. None of the above noted references, whether considered individually or whether considered in any proper combination, teach, disclose or render obvious the various combination of features that define Applicant's invention, as embodied by the particular recitations of each of the respective claims pending herein. Thus Applicant respectfully requests reconsideration and withdrawal of each of the above noted rejections together with an indication of the allowability of all the claims in the present application, in due course.

Applicant's invention is directed to a filtering device as defined in claim 1, a digital camera as defined in claim 13, and a filter processing method as defined in claim 14. Utilizing the filtering device as defined by claim 1 as a non-limiting example of Applicant's invention, the filtering device filters original image data, the original image data having original luminance data and color difference data. The filtering device comprises a generating processor that generates first luminance data and second luminance data such that the original luminance data is separated

into the first luminance data and the second luminance data according to a predetermined ratio. A filtering processor filters the second luminance data by a low pass filter so as to transform the second luminance data into third luminance data while the first luminance data and the color difference data are not low pass filtered. A synthesizing processor synthesizes the first luminance data, the color difference data and the third luminance data into synthesized image data, wherein the third luminance data defines a blurred luminous image, and the synthesized image comprises a soft focus image that preserves a color balance of the original image data.

No proper combination of the above-noted references cited by the Examiner discloses at least the above noted combination of features recited in Applicant's pending claim 1.

In setting forth the rejection, the Examiner asserts that the first luminance data comprises the middle-high range luminance component of ZHANG. The Examiner further asserts that the filtering processor comprises the low-frequency luminance signal generation section 15. However, the middle-high range luminance component is in fact low pass filtered, as is explicitly set forth in paragraphs [0095] through [0097]. In direct contrast to the above, Applicant's claim 1 requires that the first luminance data and the color difference data are not low pass filtered. Accordingly, ZHANG is an inappropriate basis for the rejection of any of the claims in the present application.

In setting forth the rejection, the Examiner admits that ZHANG does not teach a synthesizing processor as recited in Applicant's claims. The Examiner then relies upon IKEDA for this feature. However, IKEDA relates to a controller that performs a first photographing operation at an in-focus condition and obtains a first image pickup signal and performs a second photographing operating at an out-of-focus condition. The signal processing circuit generates a luminance signal in accordance with the first image pickup signal and a chrominance signal in accordance with the second image pickup signal. However, the synthesizing processor recited in Applicant's claims synthesizes the first luminance data, the color difference data and the third luminance data which are all based upon or derived from an original image data, not from two different image data.

Moreover, neither ZHANG nor IKEDA results in a soft focus picture image, as recited in Applicant's claims. Accordingly, no proper combination of ZHANG and IKEDA can result in Applicant's invention as recited in the pending claims and no proper combination of ZHANG

and IKEDA contain disclosures adequate, even if combined as proposed by the Examiner, to render any of the claims of the present application unpatentable.

In this regard, Applicant notes that ZHANG explicitly discloses, as an objective and result of the structure thereof, that a sharp image is formed. See for example paragraph [0042] of ZHANG. In direct contrast Applicants claim 1 recites that the “synthesized image data comprises” a soft focus image.

In setting forth the rejection of claim 9, the Examiner additionally relies upon the disclosure of JOGO to disclose a soft focus image. However, in JOGO the blurred image, which is produced by enhancing a low spatial frequency band of the original image, is synthesized with the original image to generate a soft focus image, as disclosed in column 4, lines 21 through 28. However, in JOGO the low spatial frequency band of the color difference component of the original image is enhanced so as to generate a blurred image. In direct contrast, the low spatial frequency band of the color difference data is not enhanced according to the recitations of the present invention.

Accordingly, for this additional reason it is respectfully submitted that the claims of the present application are clearly patentable over the references relied upon by the Examiner in the outstanding Official Action.

Moreover, in setting forth the various combination rejections, the Examiner has not provided a proper logical reasoning in support of his proposed combinations. The Examiner has merely pointed out that such combinations would result in images of good quality and high definition. However, the Examiner has presented no evidence that either of the references alone lack this feature and that it is the combination of references that provides this advantageous feature. In particular, the basis for the Examiner's reasoning appears to be a feature of IKEDO alone and thus do not appear to be necessary to be combined with the teachings the ZHANG reference, to overcome any problem or deficiency thereof. Accordingly, for this additional reason the Examiner's combinations are submitted to be defective.

For each of the above reasons and certainly for all of the above reasons it is respectfully submitted that the Examiner's rejections are inappropriate and that the claims in the present application are clearly patentable over the references relied upon by the Examiner.

Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw each of the outstanding rejections and to indicate the allowability of all the claims in the present application.

SUMMARY AND CONCLUSION

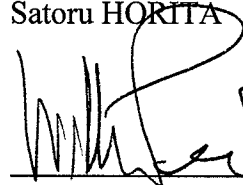
Applicant has made a sincere effort to place the present application condition for allowance and believes that he has now done so. Applicant has amended several of the claims, canceled one claim and submitted a number of additional claims for consideration by the Examiner. Applicant has amended the specification to eliminate language informalities and has submitted a new more descriptive title.

Applicant has amended the claims for enhanced clarity and has discussed the disclosures of the references applied thereagainst. Applicant has noted for shortcomings and deficiencies of the references relied upon by the Examiner. Applicant has additionally contrasted the explicit recitations of Applicants claims with the disclosures of the references relied upon. Accordingly, Applicant has provided clear evidentiary bases supporting the patentability of all the claims to present application and respectfully request an indication to such effect, in due course.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted,
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